

## ABSTRACT OF THE INVENTION

A current mirror circuit that provides an excellent current that does not deteriorate, even when the power source is lower supply voltage. A mirror current flows in a first MOS transistor when a constant current flows in the MOS transistor from a current source. A subtracter outputs the difference between voltage  $V_{g1}$  of the gate of the MOS transistor and voltage  $V_{d1}$  of the drain, and applies this difference to the gate of a second MOS transistor. When the power-supply voltage of this circuit becomes lower supply voltage and the absolute value of  $V_{d1}$  decreases, the MOS transistors enter the triode region, and the mirror current decreases. when the absolute value of  $V_{d1}$  decreases, because the difference between  $V_{g1}$  and  $V_{d1}$  becomes larger, the drain current of the second MOS transistor increases, and the amount by which the mirror current decreases is counterbalanced.